

Customer No.: 31561
Application No.: 10/711,540
Docket No.: 13365-US-PA

REMARKS

Present Status of the Application

The Office Action rejected claims 25-29 under 35 U.S.C. 102(b) as being anticipated by Glenn et al. (U.S. Patent No. 6,117,705). The Office Action also rejected claims 30-34 under 35 U.S.C. 103(a) as being unpatentable over Glenn et al. (U.S. Patent No. 6,117,705).

Discussion of Office Action Rejections

1. The Office Action rejected claims 25-29 under 35 U.S.C. 102(b) as being anticipated by Glenn et al. (U.S. Patent No. 6,117,705). In response thereto, Applicants respectfully traverse the rejections for at least the reasons set forth below.

Independent claim 25 recites the features as follows:

25. A chip with polymer thereon, comprising at least:
a chip having an active surface;
a polymer, disposed at periphery of the active surface of the chip extending to sidewalls of the chip; and
a plurality of wires electrically connecting the chip and a carrier for carrying the chip, wherein a portion of each wire near the active surface of the chip is covered by the polymer.

(emphasis added)

Claims 28-19 recite similar features as set forth in claim 25.

In re U.S. Patent No. 6,117,705, Glenn et al. fail to disclose that "the polymer

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covers a portion of each wire near the active surface of the chip". Therefore, rejection of claims 25 and 28-29 should be withdrawn.

2. The Office Action also rejected claims 30-34 under 35 U.S.C. 103(a) as being unpatentable over Glenn et al. (U.S. Patent No. 6,117,705). Applicants respectfully traverse the rejections for at least the reasons set forth below.

In re U.S. Patent No. 6,117,705, Glenn et al. fail to disclose that "the polymer covers a portion of each wire near the active surface of the chip". Specifically, in Column 15, lines 51-52 of U.S. Patent No. 6,117,705, Glenn et al. disclosed that "In addition, bead 320 of FIG. 7 completely envelopes bond wire 208"; and in Column 15, lines 57-60 of U.S. Patent No. 6,117,705, Glenn et al. further disclosed that "By covering the exposed peripheral portions of metal pad 222, as well as upper surface 201 of substrate 200, bead 320 helps prevent external moisture which may penetrate substrate 200 from reaching cavity 11 and die 100". From the description of U.S. Patent No. 6,117,705 mentioned above, Applicants consider that the bead 320 disclosed by Glenn et al is a kind of adhesive or sealant for bonding the substrate 200 and the lid 400 shown in FIG. 7, such that the die 100 can be sealed in the cavity 11 defined by the bead 320, the substrate 200 and the lid 400. It is noted that, one skilled artisan definitely would "NOT" allow the bead 320 to encapsulate only a portion of the bond wires 208. In other words, one skilled artisan would "NOT" allow the bond wires 208 exposing outside the bead 320 because reliability of package will deteriorate significantly. One skilled artisan would not be motivated to modify the bead 320, since the bond wires 208 should be protected

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properly. Therefore, Applicants assert that Glenn et al. fail to disclose, teach, or suggest that "a portion of each wire near the active surface of the chip is covered by the polymer" and claims 25 should be novel and non-obvious. Additionally, dependent claims 28-29 and 30-43 of claim 25 should be novel and non-obvious also.

For at least the foregoing reasons, Applicant respectfully submits that all presently pending claims 25, 28-29 and 31-24 patently define over the prior art references, and should be allowed.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 25, 28-29 and 31-24 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Date: *May 3, 2006*

Respectfully submitted,

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